

Making Paradise More Affordable with Weatherization

Hawaii's lush tropical forests and beautiful beaches allude to an "American Paradise." But paradise has a price. Hawaii's remote location has driven the cost of living to astronomical levels, particularly due to the high cost for energy. Rising energy prices compound the already high cost of living, especially for low-income families. To alleviate the energy burden on low-income families, Hawaii partners with the U.S. Department of Energy (DOE) to implement the Weatherization Assistance Program (Weatherization). Weatherization reduces energy costs for low-income households by increasing the energy efficiency of their homes, while ensuring their health and safety.

Although Hawaii is a sunny paradise, abundant rainfall makes the climate humid and sticky year round. Residents rely on mechanical cooling systems to keep their homes cool and comfortable. For low-income families, keeping cool can be a challenge. Low-income households typically spend 14% of their total annual income on energy, compared with 3.5% for other households. This burden becomes even more pronounced when energy prices soar. Because utilities in Hawaii rely mainly on imported oil, volatile changes in world markets have a big impact on local energy costs. Low-income families often have to cut back on other necessities to pay their energy bills.

Hawaii's Weatherization Program prioritizes services to the elderly, people with disabilities, and families with children. These low-income households are often on fixed incomes and are most vulnerable to rising energy prices. Weatherization measures reduce home energy consumption and provide a permanent boost to the household's budget.

NATIONAL WEATHERIZATION PROGRAM

Homes weatherized in 1999	68,000
DOE allocations in 1999	\$135 million
Average annual energy cost savings per household	\$300
Average space heating savings	25-30%
Energy benefits returned for every \$1 invested	\$2.10
Jobs supported	7,000

HAWAII

Homes weatherized in 1999 (with DOE \$)	110
DOE funding in 1999	\$116,462
Clients served in 1999	160
Elderly	28%
People with disabilities	13%
Families with children	59%

SPIRIT OF ALOHA

Hawaii's Office of Community Services (OCS) administers the Weatherization Program and four community-based agencies deliver services to eligible residents. Hawaii crews use an energy audit and diagnostic equipment to determine the most cost-effective energy efficiency measures appropriate for each home. Typical weatherization measures include installing insulation and mitigating air leakage through windows, doors, and other infiltration points.

The welcoming “Spirit of Aloha” is embodied in the professionalism and courtesy of Hawaii’s weatherization staff. Weatherization crews receive technical training at national conferences, regional training meetings, and in the field. These skilled technicians provide comprehensive energy efficiency solutions for low-income families and serve as a resource to the community. Local agencies can bridge the service delivery gap between federal, state, and community programs and agencies.

PRESERVING PARADISE

Hawaii uses its scarce resources effectively. In addition to delivering weatherization measures, Hawaii works to find alternative sources of energy, such as wind and solar power, to decrease its dependence on imported oil. Hawaii built the world’s largest wind generator to harness this clean and inexhaustible source of power.

Hawaii’s Weatherization Program advances the search for safe, alternative energy sources. Currently, local weatherization agencies are using leveraged funds to implement pilot projects that channel the power of the sun. DOE partnered with OCS, Hawaii Housing Authority, Honolulu Community Action Program, and Hawaiian Electric Company in a pilot project to install solar water heaters in low-income, multi-family dwellings in the city and county of Honolulu on the island of Oahu. After the solar measures were installed, the low-income families saved an average of \$400 on their annual energy bills.



Weatherization crews installed solar panels into low-income homes, which decreases Hawaii’s dependence on imported oil.

OCEAN OF BENEFITS

Weatherization creates a vast range of energy, economic, and environmental benefits. Weatherization reduces energy costs for low-income families and helps them to become more self-sufficient. This benefits the community by keeping dollars in the local economy that would typically be exported out to pay for energy. Every \$1 retained in the community produces an estimated \$3 in multiplier benefits.

Reducing residential energy demand decreases electricity generation and associated power plant emissions, a significant source of air pollution. Helping low-income families lower their energy consumption improves local air quality and reduces adverse health effects, particularly

asthma. Weatherization measures also reduce annual emissions of carbon dioxide, a leading greenhouse gas, by an average of one metric ton per weatherized home.

WEATHERIZATION WORKS!

Weatherization produces an impressive array of benefits for low-income households and communities. Nationally, for every \$1 invested in the program, Weatherization returns \$2.10 in energy-related benefits. Weatherization measures reduce national energy consumption and curb demand for imported oil. Weatherization works for Hawaii and America!



TO LEARN MORE ABOUT THE WEATHERIZATION ASSISTANCE PROGRAM, CONTACT:

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Visit the Weatherization Web site at: www.eren.doe.gov/buildings/weatherization_assistance
or call the Energy Efficiency and Renewable Energy Clearinghouse at: 1-800-DOE-3732



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